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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,844	07/03/2001	Edward T. Hessel	K-4	1464
<div>27123      7590      05/16/2007</div> <div>MORGAN &amp; FINNEGAN, L.L.P.</div> <div>3 WORLD FINANCIAL CENTER</div> <div>NEW YORK, NY 10281-2101</div>				
			<div>EXAMINER</div> <div>MCAVOY, ELLEN M</div>	
			<div>ART UNIT</div> <div>1764</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>05/16/2007</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/898,844

Applicant(s)

HESSELL ET AL.

Examiner

Ellen M. McAvoy

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,5,16,18,20,22,24,26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,5,16,18,20,22,24,26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission, the amendment under 37 C.F.R. 1.116 previously filed on January 16, 2007, filed on 27 March 2007, has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 16, 18, 20, 22, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waddoups et al (6,333,298) in combination with either Dressler et al (4,604,491) or Ho et al (5,254,274), and in further view of Le et al (5,602,086).

Waddoups et al ["Waddoups"] disclose a molybdenum-free lubricating oil composition exhibiting improved fuel economy and fuel economy retention properties which comprises (a) a base stock oil compound of at least 50 wt.% mineral oil, the base stock oil having a viscosity of 4.0-5.5 mm<sup>2</sup>/s at 100°C, 95 wt.% or more saturates, 25 wt.% or less naphthenics, a NOACK

volatility of 15.9% or less, a kV of 4.0-5.5 mm<sup>2</sup>/s at 100°C, and a viscosity index of at least 120; (b) at least one calcium detergent and (c) at least one organic friction modifier. See column 1, lines 30-45. Waddoups teaches that the base stock oil should contain 50%-100% by weight of a hydrocarbon mineral oil, and that blends of hydrocarbon mineral oil and synthetic oils are suitable so long as the base stock oil used to prepare the lubricating oil compositions has the properties set forth above. Waddoups teaches that the preferred base stock oils are (a) Group III base stocks or (b) blends of Group III base stock oils with Group I, Group II or Group IV base stocks. Examples of other base stock oils of lubricating viscosity which may be blended with the hydrocarbon mineral oils to form the base stock oil useful in the invention include alkylated polyphenyl synthetic oils. See column 1, line 50 to column 2, line 42. Applicants' invention differs from Waddoups by specifying that the synthetic oil blended with the Group III base oil is an alkylated naphthalene which is alkylated by at least two C<sub>6</sub> to C<sub>30</sub> alkyl chains. However, such synthetic base oils are known in the art as evidenced by Dressler et al ["Dressler"] and by Ho et al ["Ho"].

Dressler discloses synthetic base oils for functional fluids and greases comprising a mixture of monoalkylated naphthalenes and polyalkylated naphthalenes represented by the formula in column 1, lines 20-28, wherein the R groups are independently selected from H, methyl, and a 12-26 carbon atom alkyl. Dressler teaches that the synthetic naphthalene oils may be used for preparing lubricants, hydraulic fluids and other functional fluids. See column 2, lines 15-22. The examiner is of the position that the alkylated naphthalenes of Dressler meet the limitations of the alkylated naphthalene component of the claims. Ho teaches aromatic

compounds alkylated with C<sub>20</sub> to C<sub>1300</sub> olefinic oligomers to produce synthetic lubricant base stocks and additives for lubricants. Ho teaches that the alkylated aromatic products have the structure set forth in column 3, lines 35-58, wherein polyalkylated naphthalenes are found in the second formula. The examiner is of the position that the polyalkylated naphthalenes of Ho meet the limitations of the alkylated naphthalene component of the claims. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have blended the polyalkylated naphthalene synthetic oils of either Dressler or Ho with the lubricating oil composition of Waddoups. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation relied on by the examiner is the disclosure in Waddoups allowing for the addition of synthetic base oils to the composition such as alkylated polyphenyls. Naphthalenes are an example of polyphenyls. Further, Le et al ["Le"] is added to show that alkylated aromatic base fluids, such as alkylated naphthalenes, are known to be blending stocks with other lubricating base oils such as polyalphaolefin base fluids.

The rejection of the claims under 35 U.S.C. 103(a) as being unpatentable over Kostusyk et al (4,880,553) in view of Xiao et al (5,993,644) made in the previous office action is withdrawn in view of the remarks filed 16 January 2007.

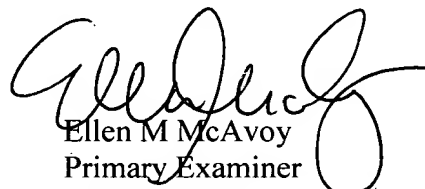
*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ellen M McAvoy  
Primary Examiner  
Art Unit 1764

EMcAvoy  
May 3, 2007